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| 10/678,800 | 10/03/2003 | Todd P. Guay | oracle01.026 | 3882 |

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| EXAMINER | |
|---|---|
| AHLUWALIA, NAVNEET K | |

| ART UNIT | PAPER NUMBER |
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| 2166 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/678,800 | GUAY ET AL. | |
| | Examiner | Art Unit | |
| | NAVNEET K. AHLUWALIA | 2166 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *03 December 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-8 and 25-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 25-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

1. This communication is in response to the Amendment filed 12/03/2008.

### *Response to Arguments*

2. Claims 1 – 8 and 25 – 32 are pending in this Office Action. After a further search and a thorough examination of the present application, claims 1 – 8 and 25 – 32 remain rejected.

3. Applicant's arguments filed with respect to claims 1 – 8 and 25 – 32 have been fully considered but they are not persuasive.

*Applicant argues that there is no teaching in the combination of Bakalash and Lore, specifically Lore as it does not disclose an aggregate entry that includes a field whose value is a representation of a set of individual members, the individual members being derived from values contained in entries belonging to the plurality of the entries, and the representation specifies the individuals members of the set.*

*In response to Applicant's argument, the Examiner submits that Bakalash and Lore in combination and specifically Lore discloses an aggregate entry that includes a field whose value is a representation of a set of individual members, the individual members being derived from values contained in entries belonging to the plurality of the entries, and the representation specifies the individuals members of the set. This is disclosed in Lore in paragraphs 125 and 191. In paragraphs 125 discloses aggregated records, keys and the address files of the data stored or cached. Furthermore,*

*paragraph 191 teaches in detail the function of the aggregated entry which includes a field that represents the individual members and these members are specified along with their addresses..*

Hence, Applicant's arguments do not distinguish the claimed invention over the prior art of record. In light of the foregoing arguments, the 103 rejections are sustained.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1 – 8 and 25 – 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bakalash et al. ('Bakalash' herein after) (US 2002/0029207 A1) further in view of Lore et al. ('Lore' herein after) (US 2002/0099691 A1).

With respect to claim 1,

Bakalash discloses a method of aggregating a plurality of entries in a table in a database management system into an aggregated entry in the table or another table in the database management system, the method comprising the steps of: making the aggregated entry, the aggregated entry representing the plurality of entries and including a field whose value is a representation of a set of individual members, the individual members being derived from the values contained in entries belonging to the plurality of the entries the representation specifying the individual members of the set (paragraphs 25, 29, 55 – 57, 68 and 73 – 74, Bakalash).

Bakalash does not disclose the aggregated entry as argued by the applicant.

Lore, however teaches the aggregated entry as explained by applicant. This disclosure can be found in paragraphs 35 – 39 and 68 – 71.

It would have been obvious to one of ordinary skill in the art of data processing at the time of the present invention to combine the teachings of cited references because both applications/inventions are directed towards the same field of study, namely aggregation of data. Furthermore, the aggregated entry type disclosed in Lore diminishes space/memory wasted in storing the full detail data of the pre-aggregated data (paragraphs 35 – 39, Lore).

7. Claims 2 – 8 are rejected under the same rationale as claim 1 above.

With respect to claim 2,

Bakalash discloses the method set forth in claim 1 further comprising the step of: deleting the plurality of entries represented by the aggregated entry (paragraphs 216, 258, Bakalash).

With respect to claim 3,

Bakalash discloses the method set forth in claim 1 wherein: the representation of the set has a size which varies with the number of members in the specified in the representation (paragraphs 41, 71 and 94, Bakalash).

With respect to claim 4,

Bakalash discloses the method set forth in claim 3 wherein: The representation of the set comprises a character string wherein the character string comprising a sequence of for each individual member of the set and separator characters separating each sequences of characters (Figure 10A-B, Bakalash).

With respect to claim 5,

Bakalash discloses the method set forth in claim 1 wherein: the representation of the set has a size which is constant regardless of the number of the individual members in the set (paragraphs 41, 71 and 94, Bakalash).

With respect to claim 6,

Bakalash discloses the method set forth in claim 5 wherein: the representation of the set represents the set as a string of elements, there being an element corresponding to each potential member of the set, the presence of a particular member in the set being indicated by a first value of the corresponding element and the absence of the particular member being indicated by a second value of the corresponding element (paragraph 59 – 62, Bakalash).

With respect to claim 7,

Bakalash discloses the method set forth in claim 1 wherein: in the step of deriving members of the set, the values from which the members of the set are derived are time values (Figures 17A, 18A-B, Bakalash).

With respect to claim 8,

Bakalash discloses the method set forth in claim 1 wherein: in the step of deriving members of the set, the values from which the members of the set are derived are location values (paragraph 59 – 62 and Figures 17A, 18A-B, Bakalash).

With respect to claim 25,

Bakalash discloses a data storage device, characterized in that: the data storage device contains code which when executed by a processor performs a method of aggregating a plurality of entries in a table in a database management system into an aggregated entry in the table or another table in the database management system, the

method comprising the steps of: making the aggregated entry, the aggregated entry representing the plurality of entries and including a field whose value is a representation of a set the representation specifying individual members of the set of individual members, the individual members being derived from the values contained in entries belonging to the plurality of the entries the representation specifying the individual members of the set (paragraphs 55 – 57 and 73 – 74, Bakalash).

Bakalash does not disclose the aggregated entry as argued by the applicant.

Lore, however teaches the aggregated entry as explained by applicant. This disclosure can be found in paragraphs 35 – 39 and 68 – 71.

It would have been obvious to one of ordinary skill in the art of data processing at the time of the present invention to combine the teachings of cited references because both applications/inventions are directed towards the same field of study, namely aggregation of data. Furthermore, the aggregated entry type disclosed in Lore diminishes space/memory wasted in storing the full detail data of the pre-aggregated data (paragraphs 35 – 39, Lore).

8. Claims 26 – 32 are rejected under the same rationale as claim 25 above.

With respect to claim 26,

Bakalash discloses the data storage device set forth in claim 25 further characterized in that: the method further comprises the step of deleting the plurality of entries represented by the aggregated entry (paragraphs 216, 258, Bakalash).

With respect to claim 27,

Bakalash discloses the data storage device set forth in claim 25 further characterized in that: the representation of the set has a size which varies with the number of members specified in the representation (paragraphs 41, 71 and 94, Bakalash).

With respect to claim 28,

Bakalash discloses the data storage device set forth in claim 27 further characterized in that: The representation of the set represents the set as a character string wherein each member is represented by a sequence of characters and the sequences of characters are separated by a separator character (Figure 10A-B, Bakalash).

With respect to claim 29,

Bakalash discloses the data storage device set forth in claim 25 further characterized in that: the representation of the set has a size which is constant regardless of the number of members in the set (paragraphs 41, 71 and 94, Bakalash).

With respect to claim 30,

Bakalash discloses the data storage device set forth in claim 29 further characterized in that: the representation of the set represents the set as a string of

elements, there being an element corresponding to each potential member of the set, the presence of a particular member in the set being indicated by a first value of the corresponding element and the absence of the particular member being indicated by a second value of the corresponding element (paragraph 59 – 62, Bakalash).

With respect to claim 31,

Bakalash discloses the data storage device set forth in claim 25 further characterized in that: in the step of deriving members of the set, the values from which the members of the set are derived are time values (Figures 17A, 18A-B, Bakalash).

With respect to claim 32,

Bakalash discloses the data storage device set forth in claim 25 further characterized in that: in the step of deriving members of the set, the values from which the members of the set are derived are location values (paragraph 59 – 62 and Figures 17A, 18A-B, Bakalash).

***Conclusion***

9. THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Navneet K. Ahluwalia whose telephone number is 571-272-5636.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam T. Hosain can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Navneet K. Ahluwalia/
Examiner, Art Unit 2166

Dated: 03/10/2009

/Khanh B. Pham/
Primary Examiner, Art Unit 2166